REMARKS

Claims 1-65 are pending in the application.

Claims 1-65 stand rejected.

Claims 31 and 55 stand objected to.

Formal Matters

Claims 31 and 55 have been objected to because of informalities. Claims 31 and 55 have been amended to address the Examiner's concerns.

Rejection of Claims under 35 U.S.C. § 102

Claims 1-65 stand rejected under 35 U.S.C. § 102(e), as being anticipated by Ogier, U.S. Patent Publication No. 2003/0095504 (Ogier). Applicants respectfully traverse this rejection

As an initial matter, while not conceding that the cited reference qualifies as prior art, but instead to expedite prosecution, Applicants have chosen to respectfully disagree and traverse the rejection as follows. Applicants reserve the right, for example, in a continuing application, to establish that one or more of the cited references do not qualify as prior art as to an invention embodiment previously, currently, or subsequently claimed.

The question of Ogier qualifying as prior art notwithstanding, Applicants respectfully submit that the rejection of claims 1, 21, 36 and 51 finds its basis in neither law, nor in fact. Claim 1 will be seen to recite:

1. (Original) A method of establishing bi-directional connectivity of a network element in a network, the method comprising:

receiving a first unreliable packet from said network element;

storing an address of said network element in a neighbor pending list;

sending a reliable packet to said network element; and

if an acknowledgement to said reliable packet is received from said network element, accepting said network element as a neighbor.

claims 21, 36 and 51 being substantially similar thereto. In rejecting claims 1, 21, 36 and 51 under 35 U.S.C. § 102(e), it is stated in the Office Action, at para. 5, that:

"5. Regarding claims 1, 21, 36 and 51, Ogier discloses a method of establishing bi-directional connectivity of a network element in a network, the method comprising:

Receiving a first unreliable packet... (para. 0227, lines 1-9)

Storing an address of said network element... (para. 0220-0221)

Sending a reliable packet... (para. 0219)

If an acknowledgement to said reliable packet is received... (para. 0231)"

As an initial matter, the above rejection fails to recite, or in any way acknowledge, the remainder of the claim elements reproduced therein. As will become evident in subsequent passages, the claim element portions omitted thereby provide important distinctions between the claimed invention and Ogier, among other infirmities of Ogier. Applicants note that in failing to consider each and every claim element and word thereof, a *prima facie* case of anticipation cannot be made. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegall Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re* Wilson, 424 F.2d 1382, 165 USPQ 494, 496 (C.C.P.A. 1970).

Moreover, the Office Action's rejection of each element is in and of itself infirm, which is now addressed on an element-by-element basis. The first element in claim 1 recites:

"receiving a first unreliable packet from said network element"

The portion of Ogier cited as anticipating the first element in claim 1 reads:

"[0227] FIG. 14 shows an exemplary embodiment of a process by which each node 18 operating according to the ROHP neighbor discovery processes a received HELLO message. In step 288, a node (referred to as receiving node A) receives a partial or complete HELLO message. Because a HELLO message must be transmitted within a time interval of length HELLO_INTERVAL, the

receiving node A declares the HELLO message to be partial if not all of its parts have been received within a time interval of this length. ..."

Among other failings in this portion of the rejection, Applicants are unable to find disclosed anywhere in the cited portion of Ogier, and indeed are unable to find disclosed anywhere in Ogier, the claimed first unreliable packet. Though Applicants respectfully disagree, the Office Action apparently equates Ogier's HELLO message with the claimed first unreliable packet.. Even if such a parallel could be drawn, such a position would fail, due to the lack of such disclosure in Ogier. Applicants are unable to find any disclosure in Ogier that contemplates the possibility of Ogier's HELLO message being an unreliable (or reliable) packet. This comes as no surprise, as Ogier describes a system that indeed suffers from the infirmities that the claimed invention is intended to address (i.e., problems resulting from a broken link), and fails to recognize the existence of such problems and so to provide any solutions thereto. Moreover, Applicants are unable to find any disclosure in Ogier in which such a distinction (i.e., reliable versus unreliable) is made with respect to any of the messages described therein, as further discussed subsequently in connection with the treatment of the third element in claim 1.

The second element in claim 1 recites:

"storing an address of said network element in a neighbor pending list"

The portion of Ogier cited as anticipating the second element in claim 1 reads:

"[0220] A HELLO packet sent by a node includes the following information:

[0221] 1). The identity (e.g., IP address) of the sending node."

Among other failings in this portion of the rejection, Applicants are unable to find disclosed anywhere in the cited portion of Ogier, and indeed are unable to find disclosed anywhere in Ogier, the claimed neighbor pending list. Applicants are unable to find anywhere in Ogier a structure comparable to the claimed neighbor pending list. This is a result of the fact that Ogier simply enters new link-state information directly into a topology table. (See, e.g., Ogier, Fig. 3) In doing so, Ogier bypasses the possibility of using a neighbor pending list or anything comparable thereto. In fact, Ogier could be expected to suffer from the problems the claimed invention is intended to address. This infirmity of Ogier is discussed in further detail with regard to the fourth element of claim 1. Moreover, Applicants are unable to determine how the cited portion of Ogier teaches the storage of any sort of information whatsoever.

The third element in claim 1 recites:

"sending a reliable packet to said network element"

The portion of Ogier cited as anticipating the third element in claim 1 reads:

"[0219] Each node 18 sends a HELLO message periodically every HELLO_INTERVAL seconds, possibly with a small jitter to avoid repeated collisions. Because of message size limitations that may be imposed by the MANET 10, a HELLO message may be too large to send within one packet, in which case, the sending node 18 sends the HELLO message in multiple packets within a period equal to the HELLO_INTERVAL. Depending on the implementation of the ROHP, the receiving node may or may not be able to extract information from a partially received HELLO message."

Among other failings in this portion of the rejection, Applicants are unable to find disclosed anywhere in the cited portion of Ogier, and indeed are unable to find disclosed anywhere in Ogier, the claimed sending of a reliable packet. As noted earlier, Applicants are unable to find, in either the cited portion of Ogier or anywhere else therein, any discussion of reliable versus unreliable packets, nor any such distinction being made with respect to any of the messages described therein. At the very least, such a distinction must be demonstrated by Ogier, as some distinction between a reliable packet and an unreliable packet must exist for such a distinction to be drawn in the first place. A reliable packet and unreliable packet therefore differing from one another in some respect, both such packets cannot be equated with a "HELLO message", as is apparently attempted in the Office Action's rejection of claim 1's first and third elements. This logical inconsistency cannot stand.

The fourth element in claim 1 recites:

"if an acknowledgement to said reliable packet is received from said network element,

accepting said network element as a neighbor"

The portion of Ogier cited as anticipating the fourth element in claim 1 reads:

"[0231] 2. If state(B)="heard" and the message includes node A in the "heard" list, then set state(B) to "symmetric" and counter(B) to K. If state(B)="heard" and the message includes node A in the "symmetric" list, then set state(B) to "symmetric" and counter(B) to 0. (In this case, the receiving node A need not include node B in its HELLO messages, since both nodes A, B already know that the link is symmetric.)"

Among other failings in this portion of the rejection, Applicants are unable to find disclosed anywhere in the cited portion of Ogier, and indeed are unable to find disclosed anywhere in Ogier, the claimed determination as to whether or not an acknowledgement to a reliable packet is received, as well as the act of accepting said network element as a neighbor.

In the former case, given that Ogier fails to contemplate any such distinction, Ogier is incapable of making a determination as to whether or not an acknowledgement to a reliable

packet is received because Ogier has no understanding of the import of a packet being reliable (or, by contrast, unreliable).

In the latter case, Ogier cannot comprehend the act of accepting said network element as a neighbor, because, so far as Applicants are able to discern, Ogier employs a link state advertisement technique that enters link-state information in a topology table. (See, e.g., Ogier, Fig. 3) However, the claimed invention employs a distinction, that being between the claimed storing an address of said network element in a neighbor pending list (the second element of claim 1) and the claimed accepting said network element as a neighbor (from the fourth element of claim 1). Logically, these are operations differ in one or more respects - were these operations the same, there would be no need to add the address of the network element to the neighbor pending list, because the operation would be redundant. Thus, the single act of entering link-state information in a topology table, even if such were comparable to either of the claimed operations (which Applicants maintain is not the case), cannot be said to anticipate two actions that differ in at least one respect, by definition.

Finally, Applicants respectfully note that the aforementioned rejection lacks the requisite specificity. Regarding independent claims 1, 21, 36 and 51, the Office Action generally directs Applicants to the cited portions of Ogier, but fails to draw any parallels between the claim elements (and sub-elements thereof) and those cited portions. Applicants have carefully studied the cited text, as noted, and can find no reference to anything comparable to the claim elements cited therefor. Applicants request that the Examiner more specifically point out portions of the cited portions upon which the Examiner believes elements of the claims read. See, MPEP §§706, 707; 37 C.F.R. 1.106(b).

As to claim 16, Applicants respectfully submit that, as noted previously, Ogier fails to disclose, and even to contemplate, the use of a neighbor pending list. Ogier fails to disclose the claimed neighbor pending list because Ogier simply enters new link-state information directly into a topology table (See, e.g., Ogier, Fig. 3), and in doing so, completely bypasses the possibility of using a neighbor pending list or anything comparable thereto, as also noted. This infirmity alone is sufficient to cause Ogier to fail to anticipate the claimed invention.

Accordingly, Applicants respectfully submit that each of independent claims 1, 16, 21, 36 and 51 clearly distinguish over Ogier, for at least the foregoing reasons. Claims 2-15, 17-20, 22-35, 37-50 and 52-65, which depend upon amended independent claims 1, 16, 21, 36 and 51, distinguish from Ogier for at least the same reasons as independent claims 1, 16, 21, 36 and 51. Applicants therefore respectfully request withdrawal of the rejection based upon 35 U.S.C. §102(e).

CONCLUSION

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5084.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on **July 5, 2005**.

Attorney for Applicants — Date of Signature: 7/5/05

Respectfully submitted,

Samuel G. Campbell, III
Attorney for Applicants
Reg. No. 42,381
Telephone: (512) 439-5084
Facsimile: (512) 439-5099